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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,168

06/22/2006

Eric Labarriere

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

PAPER NUMBER

3663

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,168	<b>Applicant(s)</b> LABARRIERE ET AL.	
	<b>Examiner</b> Rick Palabrica	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-46 is/are pending in the application.
- 4a) Of the above claim(s) 29, 38 and 41-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-28, 30-37, 39 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/22/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Applicant's 3/3/08 response, which elected without traverse of species E (as shown in Fig. 11), and the securing/fixing arrangement recited in claims 31 and 40, and amended claim 26, is acknowledged.

Based on the above election, claims 24-28, 30-37, 39 and 40 are examined in this Office action. Claims 29, 38 and 41-46, which read on the non-elected invention, are withdrawn from consideration.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24-28, 30-35, 37, 39 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation "the adjacent longitudinal ends" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the terminal end piece" in line 2. There is insufficient antecedent basis for this limitation in the claim. The preamble recites "two terminal end-pieces" and it is unclear as to which end piece is being referred to by the limitation.

Claim 37 recites the limitation "the end piece" in line 1. There is insufficient antecedent basis for this limitation in the claim. The preamble recites

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“two terminal end-pieces” and it is unclear as to which end piece is being referred to by the limitation.

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, “for a fuel assembly of a pressurized water nuclear reactor,” “for orienting flow of a coolant fluid ...”, etc. These clauses, as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited references.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24, 26 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Christiansen et al. (U.S. 5,533,078) or Grattier (U.S. 5,180,545).

Christiansen et al.

Christiansen et al. disclose a fuel assembly for a PWR comprising (see Fig. 2): a) fuel rods 48; b) a support skeleton comprising two terminal end pieces 46 and 42; and c) guide tubes 14.

As to claims 24 and 36, Applicant's claim language, "noses" reads on the vertical extensions of support housing 50 (see Fig. 5 and col. 4, lines 17+).

As to claim 26, some of the noses (i.e., tube cell 60) belong to members for fixing guide tube (see Fig. 5 showing tube cell 60 that receives guide 14, and col. 4, lines 18+).

Grattier

Grattier discloses a fuel assembly for a PWR comprising (see Figs. 1-9) : a) inherent fuel rods; b) a support skeleton comprising two terminal end pieces (e.g., lower end nozzle 3 and a not shown upper nozzle; and c) guide tubes 8.

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As to claims 24 and 36, Applicant's claim language, "noses" reads on the walls forming the apertures of filter plate 6, which apertures are disposed below the rods and the guide tubes 8 (see Fig. 1, 5 and 6).

As to claim 26, some of the noses (i.e., elements 36) belong to members for fixing guide tube (see Fig. 6 and col. 8, lines 63+).

4. Claims 25, 28, 30, 37 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Christiansen et al.

As to claim 25, note from Fig 5 that the lower end of the noses are sloped to converge towards an outer side of the fuel assembly.

As to claims 28 and 37, applicant's claim language, "arrangement for laterally maintaining the adjacent longitudinal ends of the fuel rods" reads on springs 54 that exert lateral force against fuel rods 48 (see Fig. 8 and col. 4, lines 34+).

As to claims 30 and 39, applicant's claim language, "arrangement for longitudinally securing the adjacent longitudinal ends of the fuel rods" reads on ledge formed by the different diameters of bores 52 and 56 (see Fig. 8)

5. Claims 27, 32, 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Grattier.

As to claim 27, Grattier discloses screws for the fixing member (see Figs. 1 and 3, and col. 5, lines 30+).

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As to claim 32, Grattier discloses an anti-debris filter 6 (see Fig. 1 and col. 4, lines 1+).

As to claims 34 and 35, Grattier discloses a bottom end piece 2 and feet 3 (see Fig. 1).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C-G further illustrate prior art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/  
Primary Examiner, Art Unit 3663

March 31, 2008